Animal prevalence of livestock-associated methicillin-resistant Staphylococcus aureus infive Danish mink (Neovison vison) farms

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P10: Animal prevalence of livestock-associated methicillin-resistant *Staphylococcus aureus* in five Danish mink (*Neovison vison*) farms

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Background
Livestock-associated methicillin-resistant *Staphylococcus aureus* (LA-MRSA) was for the first time isolated from Danish mink in 2013. Subsequent testing of all mink submitted for clinical diagnosis in Denmark, found 34 % (20/58) mink positive for LA-MRSA. In addition, 40 % (20/50) of screened healthy Danish mink farms were found positive. LA-MRSA in mink is believed to originate from contaminated slaughter-offal in the mink feed.

Objective
The objective of the present study was to identify the animal-prevalence of LA-MRSA in five Danish mink farms.

Materials and Methods
We collected 1,500 mink carcasses from five Danish mink farms. Farmers were asked to collect 100 mink for each of the three consecutive months following the whelping period (May-July 2017). From each carcass, the right forepaw and a pharyngeal-swab was collected for investigation of MRSA by enrichment, followed by screening on selective agar.

Results
By July 1st 2017, 20 mink (5 adult, 15 mink kits) from one farm, were all tested negative. Results from the remaining mink will be presented at the conference.

Discussion and Conclusion
In the preliminary results of this study, all mink tested negative. This finding may be explained by an overall low animal-prevalence in the farm. Another explanation could be the high proportion of young mink kits (15/20) tested. All mink kits were <5 weeks of age and had therefore not yet started feeding, which may reduce the likelihood of MRSA carriage.

Perspectives
The anatomical location of LA-MRSA on mink (pharynx and paws) poses a human health hazard to farmers, who handle the animals and are at risk of bites and scratches from infected sites. To what extent LA-MRSA has dispersed in the environment of LA-MRSA positive mink farms remains for investigation.